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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/704,968	11/02/2000	Tetsuo Shibamura	097929-4689	4432

7590 05/16/2003

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EXAMINER

HUANG, EVELYN MEI

ART UNIT	PAPER NUMBER
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1625

DATE MAILED: 05/16/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/704,968

Applicant(s)

SHIANUMA ET AL.

Examiner

Evelyn Huang

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-- The MAILING DATE of this c mmunicati n appears on th cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11,13,14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 is/are allowed.
- 6) ☒ Claim(s) 13,14 and 16-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

1. Claims 11, 13, 14, 16-19 are pending.

Claim Rejections - 35 USC § 112(2)

2. The rejection for Claims 11, 13, 14, 16-19 under 35 U.S.C. 112, second paragraph is withdrawn for claim 11 in view of the amendment, but is maintained for claims 13, 14, 16-19.

Applicant maintains that claim 13, 14 are compound claims. While it is permissible to cite the use of the compound in the claim as argued by the applicant, it is unclear which compound is being claimed as recited in the instant wherein the bathophenanthroline compound are mentioned twice in different context.

For Claims 16-19, Applicant argues that it is not a product claim and so the product need not be recited. On the contrary, just listing some steps without reciting the end product is incomplete and is therefore indefinite in scope. Applicant cites the claims of issued patent directed to 'method of irradiating a portion of human body comprising...' where the end product is not recited. The claim in the cited patent is a method of use claim where the end product is irrelevant, whereas the instant claim is a process of making claim where the product is an essential element to the invention. See MPEP § 2172.01.

Claim Rejections - 35 USC § 102

3. The rejection for Claims 13, 16-19 under 35 U.S.C. 102(b) as being anticipated by Sugihara (cited in PTO-892 mailed on 7-25-2001) is maintained for reasons of record. The process (page 594) of making compound 6, 8, 10, 12 (page 593) is encompassed by the instant process claims 16-17. The compound of RN 51786-73-3 (compound 14 on page 593) and the process of preparation thereof, are encompassed by the instant claims 13, 18, 19.

Applicant did not address the rejection for claim 13.

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Applicant maintains that Sugihara does not teach the limitation of claims 16, 18 and contends that the Examiner simply recanted the end product. The prior art process of making the compounds 6, 8, 10, 12 as described on page 593 and the prior art process of making compound 14 as described on page 593 wherein the butyl lithium or phenyl lithium is reacted with the 4,7 diphenyl-1,10 phenanthroline is identical to the steps recited in the instant. The claims as recited embrace the prior art compound and process of making.

Applicant argues that Sugihara does not recite the carbanion formation and nucleophilic reaction. However, when Sugihara uses the same reactants and steps as the instant, the same nucleophilic reaction and carbanion formation would occur. Furthermore, the mechanism of a reaction is not patentable. If applicant contends that the product formed by the instant process is different from the compounds prepared by the process of Sugihara, then the products formed by the instant process should be recited in the claims to set a demarcation from the prior art.

4. The rejection for Claim 13 under 35 U.S.C. 102(b) as being anticipated by Dietrich-Buchecker (cited in PTO-892 mailed on 7-25-2001) is maintained for reasons of record. Compounds of RN 107428-38-6 and 107428-37-5 are encompassed by the instant claim.

Applicant did not address this rejection.

Claim Rejections - 35 USC § 103

5. The rejection for Claim 11 under 35 U.S.C. 103(a) as being unpatentable over Juda (3951833, cited in PTO-892 mailed on 7-25-2001) is withdrawn upon reconsideration in view of the amendment and Applicant's remarks.

Conclusion

6. Claim 11 is allowed.

Juda's Example 27 (3951833, column 8, Table V) has methyl whereas the instant has ethyl as R1 and R2. Since the activity score of Example 27 is below the score of the acceptable

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biocide (column 8, lines 50-55, 65), motivation to modify Juda's Example 27 by replacing the methyl with the homologous ethyl to arrive at the instant invention is lacking.

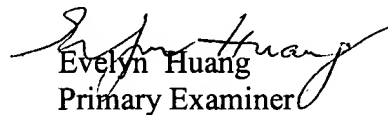
7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Evelyn Huang whose telephone number is 703-305-7247. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alan Rotman can be reached on 703-308-4698. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4556 for regular communications and 703-308-4556 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.


Evelyn Huang
Primary Examiner
Art Unit 1625

May 15, 2003